# Information NEWS Technology DIR/Information Technology Support Center

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Charles W. Grim, DDS, MHSA

Director, IHS

Keith Longie, CIO

Bruce Parker, Acting Director ITSC

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The excitement builds as the date for 2004 IHS Technology Conference grows near. There are 193 attendees registered for the conference, which will be held on August 23-27, 2004 at the Double Tree hotel in beautiful Scottsdale, Arizona. There is a block of 300 rooms reserved, so there is still space available if you are interested in learning more about the exciting new innovations in health care technology. Mr. Keith Longie, the IHS Chief Information Officer (CIO), will preside over the conference as the master of ceremonies.

With almost 100 sessions scheduled,

there is surely something to interest everyone. In addition to these informative sessions there are 12 vendors signed up for the conference. Register today at http://www.ihs.gov. If you are having a problem with registering on the Web, please call Jean Garcia at 505-248-4338, and she will assist with the registration.

Below are but a few of the many fascinating sessions planned for the conference.

Shirley Zuni *Telcommunications Specialist* 

#### **Tech Conference Presentations**

### Executive Information Support System (EISS)

Presenter: Orlando Correa

**Synopsis:** This session will focus on the use of the EISS as a management tool for RPMS. The EISS provides an integrated series of applications for information delivery, which enables customers to display critical management-level information about the enterprise with dynamic graphs and reports onthe-fly. The system currently provides

Training, Travel, and WebFRS data. Other data and reports currently in progress include: GPRA+2004, Pharmacy Drug Cost and Workload, and ASM/PSR reports.

#### Investment in the IT and Telehealth Network Infrastructure

Presenter: Wesley Old Coyote **Synopsis:** This session will focus on how facilities and Areas can effectively implement tactical and strategic plans

### **2004 Technology Conference**

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for optimum systems functionality and support. A business case for management on the ROI (Return on Investment) developed with the implementation of additional IT/Network resources will also be presented.

### Multi-Program Online Recruitment Enterprise (MORE)

Presenter: Catherine Alleva

Synopsis: The subject of this session is MORE which stands for Multi-program Online Recruitment Enterprise. It is a web application with both an Internet and an Intranet site. The Internet site's purpose is to attract candidates to a particular IHS program (pharmacy, nursing, dental...). The Intranet site allows recruiters to manage and maintain candidate information and also provides internal IHS employees with pertinent program information.

### The National Data Warehouse (NDW)

Presenters: Stan Griffith, MD & Lisa Petrakos

Synopsis: This session will provide an overview of the NDW upgrade to the National Patient Information Reporting System (NPIRS), replacing the current production NPIRS and IHPES (ORYX) systems, and its relevance to clinicians, clinical and administrative managers at the local, Area, and national levels. It will also provide technical details on the initial load and implementation of this first iteration of the NDW.

### The New Computer & Network Access System

Presenter: Jim Beyer

Svnopsis: Introduction to, and use of,

the new Computer & Network Access System. This system is replacing manual and paper-based computer access request methods throughout IHS. Learn how to use this new system to add, update, renew and remove systems and network access. Recommended for all persons, especially supervisors and area VPN coordinators.

### PCC+: Where We Are, Drifting or Adrift?

Presenter: David Taylor, Clarence Smiley, Peter Burton

Synopsis: This presentation will provide an overview of PCC+ activities to include training, deployment, implementation, program evaluation, and lessons learned. The RPMS PCC+ application was released for IHS-wide deployment in June 2001. The ultimate goal of this project is to improve the quality of health care by combining the best features of the PCC encounter form. superbill, and health summary into one integrated document. Other goals are, to increase data entry quality and productivity, improve coding and problem documentation, and to enhance a providers' ability to assess the patient's overall health care status at the time of encounter.

#### Radiology v5.0

Presenter: Chris Saddler & Patrick Beatty

**Synopsis:** Most IHS sites will go from Radiology v 4.0, past some major changes in v 4.5, straight to our current version 5.0. New features include support for additional imaging types, barcodes, HL7 interfaces for both exams and reports, and single reports for

a Parent/Descendent set of exams. There are definitely some process changes as sites allow computerized order entry in preparation for EHR. Help answer some questions about proposed modifications.

#### **User Population Reporting**

Presenter: Karen Carver, PhD

Synopsis: The IHS Director has slated several changes to the IHS user population process for FY 2004: (1) the deadline for receipt of all FY 2004 data has been moved from November 30 to November 15; and (2) no adjustments will be made for non-received data except in rare instances of information system problems that remain unresolved despite demonstrated diligence. In this session Dr. Carver will discuss the implications of these changes for IHS and tribal health programs. She will also discuss the methods by which the Division of Program Statistics has adjusted the user population in the past. She will discuss the circumstances under which these methods may still be used.

### **View Patient Record: Bridge to EHR**

Presenter: Linda Fels

Synopsis: EHR is coming to your facility and everyone is excited! However, some departments may be months away from having access. Is there a way for them to have a patient-oriented view of RPMS now, without new hardware and very little system support or training? Yes, there is. View Patient Record is a simple way

### **EHR Update**

Testing of the EHR is in full swing, new RPMS applications that are part of the EHR are being released, and facilities are gearing up all over the country.

#### **PIMS**

The first major new EHR-related application, the Patient Information Management System (PIMS) was released for distribution in June. This application contains a new scheduling component, a new ADT (Admission, Discharge Transfer) inpatient bed man-

agement system, and a sensitive patient tracking system that facilitates compliance with HIPAA privacy regulations. PIMS will be in demand at most I/T/U facilities, whether or not they intend to move to the EHR in the near future. In addition to its own functionality as described above, PIMS is a prerequisite for the new version of Radiology (v5.0) as well as for the new Pharmacy applications.

ITSC is developing a deployment strategy for PIMS that will allow rapid use of the application throughout the IHS. In addition, many Areas have recognized the value of and demand for this application and have taken the initiative to create regional PIMS deployment programs. Auser-friendly graphical scheduling component is planned for PIMS. This GUI scheduling applica-



tion will make patient scheduling more accessible and usable for I/T/U staff – release is expected in the fall.

#### **EHR Testing**

Four sites are engaged in alpha testing of the EHR and some of its component applications, such as Pharmacy and Radiology. Crow Hospital, Wind River Service Unit, Tuba City Regional Health Care Center, and Warm Springs Health and Wellness Center are all contributing to our understanding of the EHR and how it works in practice. Through their efforts, we are making almost daily improvements to the EHR software, as well as learning valuable lessons about business process changes, hardware requirements, and wireless networks. Beta testing of the EHR will take place throughout the summer at Cherokee Indian Hospital, WW Hastings Hospital, and Fort De-

fiance Hospital. The contributions of other facilities (Chinle Hospital, Phoenix Indian Medical Center, Indian Health Council) to testing of PIMS and other EHR components should also be acknowledged. The willingness of all these facilities to be pioneers and take risks cannot be over-appreciated. They will make the EHR better for all of 118.

#### **EHR Time Lines**

The EHR Program has been on an ambi-

tious time line from its inception, originally targeting as many as 20 sites by the end of this year. Our chief priority, however, is producing an application that works well in production, enhancing the quality and safety of patient care, and creating user enthusiasm and satisfaction. All EHR components (PIMS, Radiology, Pharmacy, the EHR graphical user interface, and others) need to be thoroughly tested at several locations before they can be released, either individually or as a full EHR suite. Because testing takes place in real patient care environments, it cannot be hurried or trivialized. Current plans call for EHR testing and certification to be completed in the fall of this year.

The EHR Program remains committed to the 22 facilities selected by the Area

### **Behavioral Health GUI**

### Client-centered Development and Deployment

user-centered, or client-centered, de-

sign approach also included on-site ob-

servations, interviews, and usability test-

ing. Training activities were uniquely tai-

lored according to the needs of the Ar-

Behavioral health providers are trained to listen to "client narratives" (their own story in their own words), to "start where the client is," to focus on strengths rather than deficits, and to

develop solutions to problems in true partnership with our clients. We have applied this "client-centered" philosophy in the develop-



ment, deployment, and support of the behavioral health applications as well.

Every phase of software development for the Behavioral Health (BH) GUI was influenced by the eventual users — our clients. Building on the strengths of existing RPMS applications, behavioral health providers created the requirements for the application, and clinicians worked side-by-side with developers to make certain these requirements were correctly interpreted. The

eas, and recommendations of attendees were immediately incorporated in order to improve the training experience for others. Throughout the process, the BH GUI project plan remained dynamic, changing as needed to reflect user priorities and industry standards.

#### **BH GUI Released**

ITSC released the much anticipated Behavioral Health GUI as part of the IHS Patient Chart (BPC) v1.4 in January 2004. The BH GUI is the Win-

dows-based graphical user interface to the very robust and widely deployed Behavioral Health System (BHS v3.0). BH GUI and BHS v3.0 are interim application releases on the development

path of a fully integrated electronic behavioral health application. Patient Chart v1.41 and patch 2 of

BHS v3.0 were released in June. These releases include minor modifications to enhance usability as well as several changes and new features designed to increase security and privacy, facilitating HIPAA compliance. In addition, BHS v3.0 also includes the intimate partner violence/domestic violence (IPV/DV) screening exam code.

The IHS Patient Chart was initially released in 2001. With the deployment

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### **Area Office News**

Entre Technology Services, LLC and the IHS office in Billings, Montana recently demonstrated Dragon NaturallySpeaking voice recognition technology with the Indian Health Service Electronic Health Record. Terry Deal, MD, of the Crow Agency IHS Hospital, directed the pilot installation.

"It was really smooth," said Geoff Brown, Entre voice recognition specialist. "The EHR program accepted the voice input easily and Dr Deal was able to correct recognition errors within the EHR window. We even began designing commands to navigate the EHR window itself with voice commands."

Geoff and Leann Christianson, the Billings IHS project leader, plan to develop ways to select a patient by voice and to

add lengthy text with quick voice commands. The command development will be driven by needs and requests from the providers.

Geoff Brown is available at 406.256.5700 or gbrown@entremt.com.

Leann Christianson
Computer Specialist, BAO

### **Ken Retires**

After an amazing 36 year career with the Federal government, Kenneth "Ken" Russell retired on July 3, 2004. Ken began his career at IHS as the Deputy Director of the ITSC on June 2001; he had been the Acting Director of the ITSC since August 2003. Prior to his work at IHS, he spent 10 years with the Bureau of Indian Affairs as the Director of their Office of Information Resource Management in both Albuquerque, New Mexico and Reston, Virginia.

After leaving the US Army with nearly 3 years of duty, Ken worked in a variety of non-Government Positions, including teaching at the university level while obtaining his Masters degree in mathematics. While working with Boeing and Booz-Allen, Ken worked on some technologically groundbreaking projects, such as the



Saturn V Rocket and the US Army's Huey Helicopter.

Ken started his Government Career in 1970 with the US Department of Agriculture in Kansas City as an IT Manager and Project Leader. He was the Project Officer on several major procurements, including overseeing the installation of 2700 computers in all USDA county offices and automating the USDA's Peanut Crop Quota Program with Smart Cards.

He retired briefly in 1989 to work for Telenet and Sprint and later returned to the Bureau of Indian Affairs in 1991.

Ken stated that "The IHS was the most professional organization I was privileged to work with during my Government career." When asked what he was going to do in retirement he said, "Try to break 100 in my golf game, work on the genealogy of my Choctaw Indian Heritage and try to visit all our great State and National Parks. I may try to resume my teaching career if I get bored."

You can stay in touch with Ken at his personal e-mail address: krussell117@comcast.net

Juan Torrez Documentation Specialist

### **Web Team News**

#### **New Project Approval System**

The Web team is working an exciting new application called the Project Approval System (PAS). It is being developed for the Albuquerque Area Division of Sanitation Facilities Construction. This application will greatly simplify the project approval process. A project engineer that has a new project will upload a series of documents that require approval. The system takes these documents through a 22 step approval process. The system sends emails out to various people at specific

times, asking them to approve or disapprove the document(s). These approvals and disapprovals are entered into the application and automatically trigger the next step in the process. PAS also keeps a history of everything that happens to each of the documents and when these events occurred.

#### **New CKD Site**

A new Kidney Disease Web site has been posted. This easy-to-use site was developed to provide patients and family members with information on Chronic Kidney Disease (CKD) and to assist health professionals in improving care for people with CKD. This site includes valuable tools and tons of information on CKD. Visit www.ihs.gov/medicalprograms/kidney.

#### **Tech Conference**

Want the latest information on the ITSC Technology Conference? Visit http://www.ihs.gov/AdminMngrResources/techconf/index.cfm. This site provides up to the minute information on all things related to the conferences. You can also use the registration system to register online.

### **Business Office News**

### Status Report on the New Patient Account Management System

IHS representatives continue to work with the Tribal Consortium and Informatix Laboratories, Corporation to support the new combined Third Party and Accounts Receivable RPMS applications. The new application will be called the Patient Account Management System (PAMS).

Indian Health Service representatives include: Sandra Lahi (ITSC), Adrian Lujan (ITSC), Sharon Sorrell (GIMC), Lori Aguilar (Phoenix Area), and Violet Kenny (PIMC). De Cunningham (Alaska Area) has departed for another position, and Nelda Dodge (SEARHC) has taken her place as the Alaska representative.

The PAMS workgroup meeting was held in Oklahoma City on June 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup>. Major topics of discussion have been regarding charge capture, account number assignment at the Visit check-in, PIMS check-in and relation-

ship, Data Conversion, Process changes, and Patient Registration 7.1 front-end edits. The National Business Office Committee (NBOC) has made the importance of process changes a priority and will be assisting ITSC on defining a scope of work and checklist for sites that plan to implement PAMS.

Alpha and beta sites have also been identified. The alpha sites include: Chickasaw Nation, GIMC, Choctaw Nation, Gila River, and SEARHC. The beta sites include: PIMC, Maniilaq Tribal Health Facility, Mississippi Choctaw Hospital, and a California Area tribal site.

Presentations have been provided to share information on the project at various IHS and tribal meetings. The PAMS project was presented at the Annual NAFO Conference in San Diego, California, the NBOC meeting in Albuquerque, the ISAC meeting in Scottsdale, the ISC meeting in Albuquerque, and the Navajo Area Business Office Managers meeting. Future presentations are being scheduled at tribal and Indian Health Service meetings as requests are made. A demonstration of the software is being prepared for the ITSC Technical Conference in August.

For more information on this project, there is a Web board available that provides initial information on this project including project documentation, project plans, use case scenarios and time lines. You can access this Web board at <a href="http://www.forum.ihs.gov/~PAMS">http://www.forum.ihs.gov/~PAMS</a>. Any questions can be addressed to Sandra Lahi at 505-248-4206 or Adrian Lujan at 505-248-4349.

Sandra Lahi Management & Program Analyst

### **Help Desk Statistics**

The ITSC Help Desk closed 873 support calls for the third quarter. Here's a breakdown of those calls:

- 1. Resolved within 0-7 Days: 520 (59.56%)
- 2. Resolved within 8-14 Days: 61 (6.99%)
- 3. Resolved within 15-21 Days: 42 (4.81%)
- 4. Resolved within 22 Days: 250 (28.64%)

You can contact the ITSC Help Desk by: **Phone:** 888-830-7280 or 505-248-4371



Lucas Covington, User Support Specialist

### **Domestic Violence Screening Exam Code**

#### Exam Code # 34: IPV/DV Screen

The RPMS domestic violence screening exam code allows providers to record screening results in an efficient and consistent manner. Previously, Indian, Tribal, and Urban (I/T/U) health care providers recorded results in a myriad of different ways developed locally or by default buried them in clinical notes with no way of effectively mining the data.

ITSC released the RPMS Intimate Partner Violence/Domestic Violence (IPV/DV) screening exam code in November 2003. It was released as part of the AUM 4.1 patch 1, and AUPN patch 11. It is also available in the Behavioral Health System (BHS) v3.0 patch 2. The IPV/DV Screening exam code was developed with technical assistance from the Family Violence Prevention Fund and from experienced and knowledgeable providers in the field.

#### What is Domestic Violence?

Domestic Violence, or intimate partner violence (IPV) as it is widely becoming known, is an urgent public health problem. IPV/DV is not confined to any ethnic, religious, racial, socioeconomic, or age group. It occurs among heterosexual women, men, and adolescents and also among lesbian, gay and transgender, and bisexual (LGTB) individuals. The devastating impact of IPV/DV on women, children, and families has been well documented.

Intimate Partner Violence has been defined by the Family Violence Prevention Fund (FVPF) as a "pattern of pur-

poseful coercive behaviors that may include inflicted physical injury, psychological abuse, sexual assault, progressive social isolation, stalking, deprivation, intimidation, and threats. These behaviors are perpetrated by someone who is, was, or wishes to be involved in an intimate or dating relationship with an adult or adolescent victim and are aimed at establishing control of one partner over another." Domestic Violence is a chronic condition that is treatable but if left untreated the severity and frequency of the abuse can worsen resulting in serious physical injury and even death.

### Why Screen for Domestic Violence?

Health care providers are in a unique position to help victims of IPV/DV who seek routine or emergency care. Unfortunately, health care providers too often miss this golden opportunity because they are not trained to screen patients for abuse and because standards for documenting screening results do not exist. Currently, there are no ICD-9 or CPT codes specific to screening for IPV/DV. Properly trained doctors, nurses, dentists, behavioral health, and other health care providers are uniquely qualified to intervene to help victims. Simply by routinely screening patients for IPV/DV and providing them with appropriate information and referrals, health care providers can make an enormous difference for victims and their children.

Screening for IPV/DV is quickly becoming a standard of care. It is rec-

ommended by the American Medical Association, American Academy of Family Physicians, the American College of Physicians, the American College of Obstetricians and Gynecologists, and many other professional health care organizations. While the US Preventive Services Task Force (USPTF) asserts that the effectiveness of screening has not been validated, they also state that screening is justifiable on other grounds. They site the high prevalence of undetected abuse among female patients, the low cost and low risk of screening, the adverse economic and social impact of abuse, and the nature of domestic violence as a chronic, lifethreatening condition as sound reasons for screening.

Also, domestic violence screening is a JCAHO mandate and a GPRA clinical performance indicator. The FY 2005 indicator states that the IHS will ensure that 15% of women between the ages of 15 and 40 are screened for domestic violence. The Clinical Reporting System (CRS), formerly known as GPRA +, will query RPMS for the IPV/DV screening exam code (in addition to domestic violence related POV and patient education codes).

### **How to Document Screening Results**

Health care providers and data entry staff must work together to ensure that IPV/DV screening results are documented properly and entered into RPMS in a timely and consistent manner. The results can be recorded on an

### **RPMS Development News**

#### Applications in Development

### Contract Health Services (CHS) v4.0

The CHSOs and ITSC CHS team met in Albuquerque to discuss what requirements will be on the CHS Action Item list for the development of the new version of CHS. More details in future editions of IT News.

#### **IHS Scheduling WX**

IHS Scheduling WX, also known as IHS Scheduling Windows Extension, is an exciting new GUI application that will greatly improve the scheduling process. The Windows software developed by this project will extend, but not replace, existing clinical scheduling software in PIMS version 5.3. Therefore, existing reports available in PIMS version 5.3 will continue to be used. The parts of PIMS that deal with clinic availability, however, will be replaced in order to support the Windows application.

#### **Inpatient Pharmacy v5.0\***

The Inpatient Pharmacy package is a method of computerizing inpatient drug distribution within the hospital. Unit dose orders are entered/edited by a ward clerk, healthcare provider (physician), nurse, or pharmacist, and verified by a nurse and pharmacist. Orders may also be canceled or renewed as appropriate. Once active, the orders are dispensed to the wards by means of the pick list. The system allows for dispensing tracking from the pick list.

#### **Integrated Case Management**

While in the early stages of development, the new Integrated Case Management system will include the Diabetes Management system, Asthma Management system, HIV Case Management system, and Cardiovascular Disease Management system. Although all of these applications are contained within the RPMS software application suite and pass clinical data into the PCC, each application will maintain its own set of logic that is not shared with the other systems. The benefit to this approach is that a provider will be able look at a patient record and easily identify if a patient has multiple chronic conditions, which healthcare reminders are most critical, and the significance of a lab value.

#### **Outpatient Pharmacy v7.0\***

The Outpatient Pharmacy package provides a way to manage the medication regimen of patients seen in the outpatient clinics and to monitor and manage the workload and costs in the Outpatient Pharmacy. Patients are assured that they are receiving the proper medication and have the convenience of obtaining refills easily.

The clinicians and pharmacists responsible for patient care benefit from a complete, accurate, and current medication profile available at any time to permit professional evaluation of treatment plans. Utilization, cost, and workload reports provide management cost controlling tools while maintaining the highest level of patient care.

#### Pharmacy Point of Sale (POS)

The new version will be SAC complaint. It will include new multidivisional functionality, including reports. It will

also have a new name and number space.

### Referred Care Information System (RCIS) v3.0

RCIS v3.0 is the newest version of the Referred Care Information System. In addition to reorganizing the menu options, the changes incorporated into RCIS v3.0 include improvements to the user's ability to control mail groups and bulletins; enhanced add, edit, print, and report options for Secondary Referrals; modifications to the Provider Data Entry option for New Referrals; and the addition of an In-house Referral report.

Other modifications also include changes, such as date/user stamped Business Office/Discharge notes; a separate Case Manager notes option; enhanced CHS PO/Denial options; increased user selections when running the newly renamed CHS Status Report, previously known as the CHS Pending report; and the Referral Status now displays on the Health Summary.

#### Text Integration Utility (TIU) v1.0\*

The Text Integration Utility (TIU) simplifies the access and use of clinical documents for both clinical and administrative personnel, by standardizing the way clinical documents are managed. In connection with Authorization/Subscription Utility (ASU), a hospital can set up policies and practices for determining who is responsible or has the privilege for performing various actions on required documents.

Carl Gervais
Computer Analyst

\* This package is a requirement for the EHR

### **RPMS Development News**

### Recently Released Applications

### Patient Information Management System (PIMS) v5.3\*

PIMS is the name given for a suite of software. PIMS contains the Admission/Discharge/Transfer (ADT) application, the Clinic Scheduling application, and the Sensitive Patient Tracking (SPT) module. This release includes all of the VA routines and options even if not currently used by IHS.

- The ADT package includes the basic bed control functions in addition to census tracking, incomplete chart tracking, and scheduled visits.
- The Clinic Scheduling package provides three major functions: outpatient appointments management,

pulling of paper charts for appointments, walk-ins and chart requests and thirdly primary care team management. This last item entails assigning a primary care provider to patients and grouping these providers into teams that then assists in making appointments with a patient's primary care provider or with a provider on the same team.

• The Sensitive Patient Tracking (SPT) module is part of the VA Patient Registration application. SPT allows a facility to track who accesses patient records designated as sensitive. It warns users that they are accessing a restricted record.

### Pharmacy Auto Refill System (BEX) v1.0

The Pharmacy Auto Refill system allows RPMS to interact with a commercial automated telephone system (AudioCare®) to refill prescriptions. The system will also check on prescription status and provide feedback to patients who are calling to have prescriptions refilled.

### IHS GPRA Reporting System (BGP) v3.1

Because definitions of clinical indicators can change every year, GPRA+ will be updated and released annually. The current version BGP 3.1 adds FY 2004 clinical performance indicators to

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\* This package is a requirement for the EHR

### Implementing the Patient Information Management System (PIMS) at Your Site

ITSC has a Patient Information Managment System (PIMS) Implementation Team available to assist sites with "just in time" PIMS training and installation. This team provides on-site training followed by installation and post installation support. Currently, the team is focusing on deploying PIMS at EHR beta test sites, but if you are interested in this type of support, please download and complete the site profile from the PIMS Web site and send it to pimshelp@IHS.HHS.gov.

Sites that have implemented PIMS to

date include: Tuba City Indian Medical Center, Fort Washakie Health Center, Crow/Northern Cheyenne Hospital, Warm Springs Health & Wellness Center, Carnegie Indian Health Center, Chinle Hospital, Cherokee Indian Hospital, PIMC, Fort Defiance Indian Hospital, W.W. Hastings Indian Hospital, Chief Andrew Isaac Health Center, Maniilaq Health Center, Whiteriver PHS Indian Hospital, Red Lake Comprehensive Health Services, Ho-Chunk Health Care Center, and Rosebud PHS In-

dian Hospital.

ITSC is currently offering abbreviated PIMS training sessions at several Area training facilities. The training focuses on the new functionality of the Scheduling, ADT, and Sensitive Patient Tracking modules. To learn more about PIMS, visit our PIMS Web page on the EHR Web site at http://www.ihs.gov/cio/ehr/ehr-pims.asp.

David White User Support Specialist

### **RPMS Development News**

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#### Recent Patch Releases

existing FY 2002 and FY 2003 indicators.

### IHS Patient Chart System (BPC) v1.41

Patient Chart v1.41 is an enhanced version and includes greater flexibility for data entry, changes in the user interface for improved usability, and corrects several known errors.

### VA Lexicon Utility (LEX) v2.0\*

This VA utility will be used by future EHR applications. Simply install it on your system. There is no need to place the few menu options on any user's menu. The utility is accessed primarily by APIs called by other packages.

#### VA Health Summary (GMTS) v2.7\*

The VA Health Summary package performs functions similar to that of the IHS Health Summary application. They do NOT share any files or routines. This version is being distributed so the CWAD function in TIU will work properly.

#### Visit Tracking (VSIT) v2.0\*

This suite of VA packages includes Visit Tracking v2.0 (VSIT), Patient Care Encounter - PCE v1.0 (PX) and Clinical Reminders v1.5 (PXRM). It can be installed on your system without affecting other applications. Although PCE uses the same files as PCC, the routines are different. No PCC files were included in this distribution.

### Dental Data System (ADE) v6.0 patch 15

This patch takes advantage of a new field #500 RVU (Relative Value Unit) added to the ADA CODE file by the



patch AUT\*98.1\*13 IHS DICTIO-NARIES (POINTERS). Modifications were made to print templates and routines to add the RVU to various reports.

### Patient Registration (AG) v7.0 patch 4

Patient Registration v7.0 patch 4 contains 2 fixes for known errors.

### Behavioral Health (AMH) v3.0 patch 2

Patch 2 adds new options, modifies several screens, enhances usability, and addresses several known errors.

### PCC Data Entry (APCD) v2.0 patch

This patch includes 21 modifications and fixes and 4 new mnemonics.

### PCC Health Summary (APCH) v2.0 patch 11

This patch makes 24 fixes and modifications to the PCC Health Summary v2.0 package.

### PCC Data Extraction (APCP) v2.0 patch 7

Patch 7 contains 3 modifications and corrects 2 known errors.

### IHS Dictionaries (Patient) (AUPN) v99.10 patch 13

Patch 13 includes a new cross-references to populate the DW Audit file for the National Data Warehouse project, adds two new fields, modifies two routines, and addresses 1 known error with patch 12.

### IHS VA Support Files (AVA) v93.2 patch 18

Patch 18 is NOT CUMULATIVE of previous patches to AVA v 93.2. This Patch contains new cross references on fields in the VA Patient file needed for the National Data Warehouse project. These cross references will populate the DW Audit file.

### Accounts Receivable (BAR) v1.7 patch 5

Patch 5 incorporates HIPAA compliant Remittance Advice Remark Codes and HIPAA compliant NCPDP Reject/Payment Codes, creates a new posting menu option called Standard Adjustment Reason Code Inquiry, and modifies the ERA Posting option Review Postable Claims allowing

### **Technology Management Team**

### **Active Directory Update**

#### **Migrations**

The Exchange migrations still require a considerable amount of work before completion.

To date we have the following sites scheduled:

Billings Area Office = July 12 OKC - Clinton/El Reno = July 19 Seattle/Dallas OEH = August 2 Portland Area Office = August 30 Tucson Area Office = July 19 ABQ Jicarilla = September 27 ABO Zuni = October 18

The following sites remain unscheduled: Billings Service Units A few Oklahoma Service Units Portland Service Units Albuquerque Service Units

For those sites that remain, it is important to begin working on contracts to keep Dell on the project. If there are breaks in the migration, we will lose the current Dell Migration Team that has been working on this project. If this happens, we will end up with different technicians that are unfamiliar with the IHS project. This will cause the migration process to be longer and more difficult, which in turn will cost IHS more money.

The Phoenix Area will begin collapsing their Exchange 5.5 environment beginning July 19, 2003. Their progress will be posted in future editions of the IT News.

#### **Training at ITSC**

Two weeks ago the Windows 2003 Server Administration & Exchange 2003 Server Administration Training courses were announced. Courses are being offered at the ITSC. Below are the dates and availability as of July 14.

#### Windows 2003 Server Administration

July 19 – 23 (Full) August 16 – 20 (2 slots)

### Exchange 2003 Server Administration

August 31 – September 2 (6 slots) September 21 – 23 (3 slots)

Please contact Karen Wade at 505-248-4254 or

karen.wade@IHS.HHS.gov for registration. Classes are filling up and we are starting a waiting list. If there is a high demand, future courses will be planned and offered in other parts of the country.

#### **Future Plans**

ITSC is looking to hire a Sr. Level Microsoft Systems Engineer available to the IHS full time.

ITSC is developing an Active Directory Handbook that will cover many Administrative topics such as:

- MS Active Directory Design Overview
- FSMO Roles
- Active Directory Sites & Private IP addressing issues
- Importance of DNS
- OU Structure
- MS Exchange 2003 Design Overview
- MS Active Directory and MS Ex-

change common terms and definitions

- Installation of Admin Tools & ESM
- Daily Administrative Tasks creating users, groups, contacts, computer objects
- Correctly joining computers to the domain
- Group Policy Overview
- Mail flow within IHS
- Coexistence with MS Exchange 5.5
- Active Directory Connector
- MS Exchange queues and Non-Deliverable Report (NDR) troubleshooting
- Outlook Auto naming feature & clearing the cache
- Advanced MS Exchange Server Concepts and Configuration
- Backup/Restore process and best practices
- Domain Controller & MS Exchange hardware requirements and build information
- Time Synchronization
- Active Directory Client Extensions for Down Level Clients

Look for the handbook to be presented at the ITSC Tech Conference. If you would like to see some specific Active Directory or LAN/WAN related topics presented at Technical Conference, send your recommendation to Karen Wade.

Karen Wade Computer Specialist

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### The Evolution of the EHR: The Poem

Some think it quite strange, this electronic change, to endeavor to make at this time...

So let me try to explain, the reason that it came, in poem and verse and rhyme.... It's no small tale, and there were groans and wails, as certainly one would surmise

And to try to stay sane, now that there's the game...when some of us aren't feeling so wise...

It began long ago, which the old healers know, that after treating some poor soul.. They had need to recall, what cured it all, so they made marks on the rocks with coal.

Now that was a mess, but no one dared guess, what might next come to be...

Though most likely affordable, the rocks were not portable,..though some kept them piled by their knee...

"There must be a way", the healer's would say," to keep all these records at hand

And to find them right quick, when someone was sick, and not be searching all over the land!"

So they gazed round the yard, and thought real hard, and came up with the best answer they could...

"We'll just use what we see.. and cut down some tree, and scratch our notes into the wood!"

Well they tried that a while, but there weren't many smiles, though the charts could be stacked quite higher...

For it was later told, that when the nights got cold, the charts would get used for the fire!

So they formed a great ring, to work on the thing, to come up with something that worked...

And there was lots of discussion, but no one was rushin', until one healer started

to smirk...

Though there were many doubts, he laid it all out, this idea inside of his head...

They'd smash up the wood, and roll it out good, and call it "paper" instead!

This worked much better, until it got wetter, and the charcoal turned into paint And though the pictures were nice, and they brought a good price, the coders just said they were 'quaint'.

But the pharmacists got miffed, "We can't read this script!", "Do you expect us to just guess what you think?" "Instead of this modernistic art... that you have placed in this chart...

Why not just try using ink?"

Now one can't deny, it was worth a good try, so they began to use ink in their notes...

There grew a great pile, and people would smile, as the charts away they would tote!

And for a time, things worked out just fine, as the charts would all move around...

For writing was fast, and the words would last... as long as the chart could be found!

See it can't be denied, as the charts multiplied, a new problem began to emerge...

They began to grow feet, and run down the street, and the healers were all on the verge...

"When I need a chart, I need it now!", they cried in a harmonious wail...

"If I wait I'll forget, and GPRA standards won't be met, and healers don't like to fail!!"

So an office appeared, and the healers all feared, for it said only "I-T" on the door...

And there was a definite rumble, as the healers all mumbled, discussing what "IT" stood for...

So they crept up and knocked, but the door was locked, but a note was soon slid under

In way of apology, was written "information technology", and the healers walked away in wonder...

Now "IT" was an ominous place, and the healers would pace, speculating what was to come after...

When in the gathering gloom, from the kitchen conference room, there came a peal of hilarious laughter...

Then a shout and someone screamed, "It works like a dream!"

"This is exactly what we were after!"

So the years went by, and after many tries, we've managed to come this far... And so we are here, after many years, with a new chart we call EHR...

And no one can guess, what might come next, in the years that lie far ahead...
Because one never knows, what ideas will grow, when healers start scratching their heads.

Marge Koepping, FNP Warm Springs EHR Implementation Team



### **RPMS Training Schedule (By Location)**

### July

#### **Alaska**

07/20-22 CHS\*

#### <u>Albuquerque</u>

07/7-9 PIMS \*

07/13-15 Site Manager \*

07/20-23 Intermediate Laboratory \*

#### <u>Bemidji</u>

07/19-23 PCC Data Entry\*

#### **Billings**

07/27-28 Behavioral Health GUI\* 07/29-30 Behavioral Health GUI\*

#### **Oklahoma**

07/20-22 Advanced Site Manager 07/26-29 PCC+ \*

#### **Portland**

07/20-22 Site Manger Conference 07/26-30 Third Party Billing/AR

#### Don't See What You're Looking For?

If you have any questions about training or wish to request a training session for your Area, please contact the ITSC training coordinator, Michelle Riedel by:

**Phone:** (505) 248-4446

**E-mail:** Michelle.Riedel@IHS.HHS.gov **Web:** http://www.ihs.gov/Cio/RPMS/

TrainSched.asp

### August

#### <u>Alaska</u>

08/17-18 POS Pharmacy Billing\*

#### <u>Albuquerque</u>

08/9-10 PIMS\*

08/11 Emergency Room

Package\*

08/12-13 Behavioral Health GUI\*

08/16-20 EHR CAC & Imple-

mentation Team Train-

ing\*

#### <u>Bemidji</u>

08/3 Scheduling\* 08/4 ADT/SPT\*

#### <u>Navajo</u>

08/17-18 Patient Registration\*

#### Oklahoma

08/17-19 Diabetes Management 08/24-26 PCC Outputs

#### **Phoenix**

08/4-6 Third Party Billing/AR \*

08/9-10 Immunization

08/11-13 PCC Output Reporting

08/17-19 Basic & Intermediate

ICD/CPT

#### **Portland**

08/9-12 PCC+ \*

08/17-18 Contract Health System

08/31 Scheduling\*

### September

#### **Albuquerque**

09/20-24 EHR CAC & Implementation Team Training\*

#### **Bemidji**

09/8-9 Patient Registration\* 09/21-23 Third Party Billing/AR\*

#### <u>Nashville</u>

09/2 PIMS: Scheduling\* 09/21-23 Third Party Billing/AR\*

#### <u>Navajo</u>

09/21-22 PIMS: Scheduling & ADT/SPT\*

#### **Oklahoma**

09/21-23 Basic Site Manger

#### **Phoenix**

09/8-9 Preparing for Outpatient 7.0, Inpatient 5.0, & EHR

09/20-23 PCC Data Entry I & II

#### **Portland**

09/14-15 Behavioral Health GUI\*
09/16-17 Beginning Diabetes
Management System

#### \* ITSC-Sponsored

If the training you're interested in is ITSC-sponsored, please contact Michelle Riedel (505-248-4446 or Michelle.Riedel@IHS.HHS.gov) for more information. If the training is not ITSC-sponsored, you will need to contact the hosting Area's Training Coordinator.



Directors for first tier implementation of the EHR. All of these facilities either have PIMS or are on the PIMS implementation schedule, and the EHR Program staff is in contact with each site regarding various aspects of site preparation. Some Area Offices are developing parallel plans for bringing the EHR up at additional facilities over the next 12 to 24 months.

#### **Site Preparation for the EHR**

In general, facilities planning for EHR implementation should envision a preparation time span of at least nine months from inception to going live. This is one reason the Program is so appreciative of those facilities that have compressed the preparation process into much shorter time frames to help launch the IHS EHR. In brief, the essential elements of site preparation can be summarized as follows (omitting a number of interim steps):

- Leadership commitment, clinician buy-in, and multidisciplinary team building.
- Mapping of an intentional Project

Management plan for EHR implementation.

- Hardware and network infrastructure assessment with necessary new acquisitions and upgrades (including elimination of Windows 95/98 computers).
- •Conversion from MSM to Cache.
- Installation of Pharmacy Inpatient version 4.5 suite and other prerequisite software.
- Business process assessment and review of potential work flow changes (professional consultation available through the EHR Program).
- Advertising, selecting, and training a Clinical Application Coordinator (CAC).
- Training and installation of PIMS application. After PIMS is loaded, it should run for at least a month before other EHR components are added.
- Installation of Radiology v5.0 application.
- Pharmacy file preparation this is an extensive process that gets pharmacy files ready for the new Pharmacy applications; the level of work for Pharmacy depends on the

- site's previous efforts to maintain "clean" pharmacy files.
- Training and installation of Pharmacy applications (outpatient v7, inpatient v5). These new Pharmacy applications should run for two months or more before turning on Provider Order Entry in the EHR.
- User training for the EHR GUI.
- Template selection for clinical notes.
   This should involve careful review of templates already developed at other locations.
- Phased rollout of the EHR to clinical users according to predetermined schedule.
- Evaluation of implementation process and EHR impact, as part of a planned national assessment of the EHR and the EHR Program.

#### **EHR Web site**

New features on the EHR Web site (www.ihs.gov/cio/ehr) include a page devoted to the PIMS application, new recommendations for hardware and network infrastructure, links to available training, and updated information on site preparation for the EHR. We will endeavor to keep the Web site updated in a way that makes it the primary and most authoritative source of information about the IHS EHR.

Howard Hays, MD, MSPH, IHS-EHR Program Director

of the BH GUI, behavioral health providers can now take advantage of the benefits of integration with multiple RPMS applications in the user-friendly environment offered by Patient Chart. Unique to the BH tab in Patient Chart is the ability to enter clinical notes, record treatment plans and reviews, and document group encounters and administrative activities. Other features include a suicide surveillance tool designed to assist BH programs in the reporting and tracking of incidents of suicide. The BH GUI facilitates direct provider entry of clinical information, rather than data entry, and providers have commented frequently on the ease of clinical documentation in the new application.

### The Training and Deployment Experience

Graphical user interfaces, by their nature, are more intuitive and user-friendly. This fact has been confirmed by feedback from users during early deployment of BHGUI. However, learning, implementing and supporting a new application, like any change effort, can produce anxiety, fear and sometimes resistance. We discovered during the first BH GUI training that while the students (including clinicians, program managers, data entry and IT staff) appeared to accept and learn the GUI more easily than the typical RPMS roll and scroll application, the pain associated with learning a new application was still present. There were also those students who were reluctant to leave behind that application with which they were familiar and had finally mastered

- the once dreaded roll-and-scroll.

The RPMS BH applications are intended for use by widely divergent IHS, tribal, and urban behavioral health programs. The users are comprised of mental health, social work, and alcohol and substance abuse professionals and paraprofessionals, all with varying degrees of computer literacy and comfort levels. The programs and facilities are equally diverse with standalone, tribally run outpatient mental health clinics, urban residential alcohol and substance abuse treatment facilities, clinic- and hospital-based social work departments and everything in between. As we developed and presented training on the BH GUI, we discovered a number of ways to make the experience more relevant and appropriate for attendees.

Discipline-specific data entry scenarios and exercises were developed with input from clinicians in the field. Selfpaced tools for independent learning were designed and widely distributed to support learning outside of the classroom. Training sessions for specific user groups, such as residential alcohol and substance abuse treatment center clinicians and staff, were especially well received and successful. A standard of a minimum of two trainers per 20 students, one being a clinician, was established. Although considerable, the time and energy invested in making frequent changes to training materials and agendas, attending post-session debriefings, and analyzing training evaluations, was time well spent.

### Plans for Future Development and Deployment

Users have tasked us with the development or inclusion of an improved, comprehensive treatment plan module in the BH GUI. This is a priority of future development efforts. Programming is underway now for enhanced group functionality, and work continues toward importing the BH GUI into the IHS Electronic Health Record. While Patient Chart has always been considered an easy-to-use, easy-to-deploy application, implementation of the BH GUI does require a different process than BHS v3.0. Changes to deployment plans include increasing the number of on-site implementation visits as an adjunct to Area training. Also at the request of users, we are hoping to be able to offer online training soon and are pursuing continuing education credit for training from the IHS Clinical Support Center.

We are extremely grateful to our clients – the users, potential users and the Division of Behavioral Health – for partnering with us in the development and deployment process of the BH applications. Behavioral health providers know that it is the client who holds the answers.

Denise Grenier MSW, LISW BH Clinical Lead

### Domestic Violence Screening Exam Code continued from page 7

overprint or stamp on the PCC encounter form or incorporated into PCC + as an easy-to-use table.

Exam results and refusals are recorded and entered into RPMS in the following way:

turing and displaying the initials of the provider who administered the exam (screening is often done by a provider other than the primary provider) and comments for exam results or refusals. Users have also submitted the requireand an IPV/DV Health Maintenance Reminder. There are also plans for the IPV/DV screening exam code to be available in future releases of the IHS Electronic Health Record.

For further information on the IPV/DV screening exam code, contact Theresa Cullen or Denise Grenier. For additional information on domestic violence and for recommendations on safe screening, visit the IHS Violence Against Native Women Web site at: www.ihs.gov/ MedicalPrograms/MCH/W/DV00.cfm or the Family Violence Prevention Fund Web site at www.endabuse.org.

Allowable results:	Exam Mnemonic	EX 34 or IPV/DV Screen
	Exam Value: INT (or 34)	IPV/DV Screen
	N	Negative (patient denies being a current or past victim of DV)
	PR	Present (patient reveals that she/he is a current victim of DV)
	PA	Past (patient denies being a current victim, but admits being a past victim of DV)
Date of Exam:		
Allowable results:	Refusals Mnemonic	EX 34 or IPV/DV Screen
	Exam Value: INT (or 34)	IPV/DV Screen
	REF	Refused (patient declined screen/exam)
Date Refused:		
Allowable results:	Exam Value: INT (or 34)	IPV/DV Screen
	UAS*	Unable to Screen (verbal child present, partner present, etc.)
Date Refused:		
*PCC Data Entry patch 7		

Suggested enhancements to the IPV/ DV screening exam code include cap-

ments for a PCC Management report to extract aggregate data on screening Denise Grenier MSW, LISW BH Clinical Lead

Theresa Cullen MD, MS Sr Medical Informatics Consultant

#### 2004 Tech Conference

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to view RPMS data by selecting the patient once, to then browse through health summaries, demographics, PCC visit data, medication profiles, lab results, progress notes, appointments and more.

#### What's New in ADT v5.3?

Presenter: Linda Fels

Synopsis: Attend this session for a preview of the new Admission/Discharge/Transfer (ADT) v5.3. Among others, some of the features include admitting 24 hour observation patients, viewing a physician's list of current inpatients along with today's appointments, easily updating a patient's current attending physician, and an incomplete chart tracking system, which stores historical data. You will also have the opportunity to have your questions answered.

#### Windows-Based Scheduling

Presenter: Horace Whitt

**Synopsis:** This session will demon-

strate the features of Windows clinical scheduling software. Included will be discussion on the underlying .NET technology used to create the software as well as the BMXNet WINDOWS/ RPMS connectivity utilities which were developed by IHS to support .NETbased RPMS applications. BMXNet enables .NET software developers to easily connect to RPMS, retrieve and update RPMS information, and manipulate and display that information using standard .NET components.

### **RPMS** Development

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check/EFT # to be reviewed more than once. It also resolves 7 Support Center calls.

### Immunization System (BI) v8.0 patch 1

Patch 1 enhances adult Pneumo forecasting, corrects letter printing by Community or by Case Manager, changes a data dictionary to Immunization Lot file to remove multiple vaccine prompts when adding new Lot Numbers, and creates new versions of six Immserve files to enhance forecasting.

#### VA FileMan (DI) v22 patch 1002

This patch includes all of the VA FileMan 22.0 patches from patch sequence 89 to 118.

### HL-7 Health Level 7 (HL) v16 patch 1005

This patch is NOT cumulative. It includes the VA Health Level Seven 1.6 patches sequence 80 through sequence 90

### PCC + Encounter Form (VEN) v2.2 patch 1

PCC+ v2.2 patch 2 addresses and fixes 5 known errors and adds one new diagnostic entry point.

#### **Periodic Updates**

CPT Current Procedural Terminology (ACPT) v2004 patch 3

Average Wholesale Pricing (APSA) v6.1 patch 50

Patient Drug Education (APSE) v6.10 patch 17

IHS Standard Table (AUM) v4.1 patch 4

Albert Toya

Quality Assurance

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## About the IT News

The IT News is published several times throughout the year by the IHS Information Technology Support Center. All articles and article suggestions are gladly accepted. If you would like to submit an article for consideration or have any questions regarding this publication please contact Juan Torrez at (505) 248-4355 or Juan.Torrez@IHS.HHS.gov.

All articles should be no longer than 1200 words in length and be in an electronic format (preferably MS Word). All articles are subject to change without notice.